CLAIMS

1.   A method for transferring a user datagram protocol (UDP) signal using frame header

information for UDP packets comprising:

    Pushing frame header information from an application layer protocol to a transport

5   layer protocol to transport the UDP packets.

2.   The method of claim 1, wherein a stack is used to push the frame header information

from the application layer protocol to the transport layer protocol.

10   3.   The method of claim 2, wherein user input to the stack does not apply to higher

layers than the physical layer.

4.   The method of claim 1, wherein the UDP packet is a UDP packet with value-added

information.

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5.   The method of claim 1, wherein a bandwidth required for a broadband network

system to deliver a UDP packet with value-added information is identical to the amount of

effort required for the broadband network system to deliver standard UDP to an end user.

20   6.   The method of claim 1, wherein the UDPVA packets further comprise additional

functionality compared to standard UDP packets.

7.   A broadband network system configured to transfer user datagram protocol with

value-added (UDPVA) packets from a broadband interface unit (BIntU) transceiver, the

25   broadband network system comprising:

a data distribution center;

the BIntU transceiver being configured to generate the UDPVA packets, the BIntU transceiver including:

an encoder/decoder (codec) configured to alternatively code or decode UDP

5   frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein the DSP portion includes a stack, the DSP portion temporarily stores the UDP frame information as UDPVA packets within the stack, and the UDPVA packets is in a form to be transmitted directly to a network destination address device; and

10   the BIntU transceiver configured to transmit the UDPVA packets to the data distribution center, and the data distribution center is configured to indicate when the data distribution center is receiving UDPVA packets from the BIntU transceiver.

8.   The broadband network system of claim 7, further comprising:

15   a second BIntU transceiver, the data distribution center configured to transmit information included in the UDPVA packet that was received from the BIntU transceiver to the second BIntU transceiver;

the second BIntU transceiver generating a return packet in response to the received UDPVA packet, wherein the second BIntU transceiver transmits the return packet to the

20   data distribution center, and wherein the data distribution center transmits information contained in the return packet to the BIntU transceiver, the return packet indicates to the BIntU transceiver that the second BIntU transceiver has received the information in the UDPVA packet.

9.   The broadband network system of claim 7, further comprising software associated with the BIntU transceiver that permits the BIntU transceiver to interface with the data distribution center.

5   10.   A broadband network system configured to transfer user datagram protocol with value-added (UDPVA) packets from a broadband interface unit (BIntU) transceiver, the broadband network system comprising:

a data distribution center;

the BIntU configured to generate the UDPVA packets, the BIntU transceiver

10   including:

an encoder/decoder (codec) configured to alternatively code or decode UDP frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein the DSP portion generates UDPVA packets in response to the UDP frame information,

15   and wherein the UDPVA packets is available for delivery to a network destination address or storage located on a local area network or a wide area network; and

the BIntU transceiver is configured to transmit the UDPVA packets to the data distribution center, and the data distribution center is configured to interface with the BIntU transceiver to indicate that the data distribution center is receiving packets from the BIntU

20   transceiver.

11.   The broadband network system of claim 10, further comprising:

a second BIntU transceiver, the data distribution center configured to transmit information included in the UDPVA packet that was received from the BIntU transceiver to

25   the second BIntU transceiver;

the second BIntU transceiver generating a return packet in response to the received UDPVA packet, wherein the second BIntU transceiver transmits the return packet to the data distribution center, and wherein the data distribution center transmits information contained in the return packet to the BIntU transceiver, the return packet indicates to the

5   BIntU transceiver that the second BIntU transceiver has received the information in the UDPVA packet.

12.   The broadband network system of claim 10, further comprising software associated with the BIntU transceiver that permits the computer or set-top box to interface with the

10   BIntU transceiver.

13.   A method of allocating higher layers and higher rates of mass communications over a wide area, the method comprising:

pulling down packets from satellites over a satellite link and distributing the

15   information over a wide area utilizing multimedia systems; and

actively controlling a volume of satellite time purchased in response to information that is pulled from the network to manage satellite transmission.

14.   A data structure included in user datagram protocol (UDP) packets, the UDP packets

20   comprising:

value-added information included in the frame header information that is transmitted from a broadband interface unit (BIntU) transceiver to be received at a data distribution center, wherein the value-added information triggers the data distribution center to transmit a return packet to the BIntU transceiver indicating that the data distribution center received

25   the UDP packet.

15.   The data structure of claim 14, wherein the value-added information that causes the data distribution center to transmit the return packet to the BIntU transceiver includes a Java applet.

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16.   The data structure of claim 14, wherein one return packet is transmitted from the data distribution center to the BIntU transceiver for each UDP packet with value-added information transmitted from the BIntU transceiver to the data distribution center.

10   17.   A method for transferring user datagram protocol with value-added (UDPVA) packet over a broadband network system from a first broadband interface unit (BIntU) transceiver to a data distribution center, the method comprising:

        generating the UDPVA packet in the BIntU transceiver, the generating of the UDPVA packet including:

15   alternatively coding or decoding UDPVA frame information within an encoder/decoder (codec), and

                generating the UDPVA packet in response to the UDPVA frame information in a digital signal processor (DSP) portion coupled to the codec, wherein the UDPVA packet is available for delivery to a network destination address or storage

20   located on a local area network or a wide area network; and

        a means for receiving the UDPVA packet from the BIntU transceiver at a data distribution center, the data distribution center being configured to interface with the BIntU transceiver to indicate that the data distribution center is receiving information from the BIntU transceiver in response to the received UDPVA packet.

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18.   The method of claim 17, wherein the UDPVA packet includes a Java applet.

19.   An apparatus that transfers user datagram protocol with value-added (UDPVA)

packet over a broadband network system from a broadband interface unit (BIntU)

5   transceiver to a data distribution center, the method comprising:

a means for generating the UDPVA packet in the BIntU transceiver, the generating

of the UDPVA packet including:

a means for alternatively coding or decoding UDP frame information within

an encoder/decoder (codec), and

10   a means for generating the UDPVA packet in response to the UDP frame

information in a digital signal processor (DSP) portion coupled to the codec, wherein

the UDPVA packet is available for delivery to a network destination address or

storage located on a local area network or a wide area network; and

a means for receiving the UDPVA packet at the data distribution center that is

15   transmitted from the BIntU transceiver, the data distribution center being configured to

interface with the BIntU transceiver to indicate that the data distribution center is receiving

information from the BIntU transceiver in response to the received UDPVA packet.

20.   A broadband network system configured to transfer user datagram protocol with

20   value-added (UDPVA) packet from a broadband interface unit (BIntU) transceiver, the

broadband network system comprising:

a data distribution center;

the BIntU transceiver being configured to generate the UDPVA packets that are

transmitted at or below a transport level, the BIntU transceiver including:

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an encoder/decoder (codec) configured to alternatively code or decode UDP

frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein the

DSP portion includes a stack, the DSP portion temporarily stores the UDP frame

5   information as UDPVA packet within the stack, and wherein the UDPVA packet is

in a form to be transmitted directly to a network destination address device at or

below the transport level; and

the data distribution center is configured to receive the UDPVA packet from the

BIntU transceiver at or below the transport level, and the data distribution center is

10   configured to interface with the BIntU transceiver to indicate when the data distribution

center is receiving information from the BIntU transceiver wherein data transmitted between

the BIntU transceiver and the data distribution center is maintained at, or below, the

transport level.

15   21.   The broadband network system of claim 20, further comprising a second BIntU

transceiver, wherein the data distribution control center forwards the UDPVA packet to the

second BIntU transceiver, and the second BIntU transceiver generates a return packet that is

forwarded via the data distribution center to the BIntU transceiver that indicates that the

second BIntU transceiver has received the UDPVA packet.

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22.   An apparatus for transferring a user datagram protocol (UDP) signal using frame

header information for UDP packets comprising:

means for pushing frame header information from an application layer protocol to a

transport layer protocol to transport the UDP packets.

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23.   A broadband network system configured to transfer user datagram protocol with

value-added (UDPVA) packets from a broadband interface unit (BIntU) transceiver, the

broadband network system comprising:

a data distribution center;

5   the BIntU transceiver being configured to generate the UDPVA packets, the BIntU

transceiver including:

an encoder/decoder (codec) configured to alternatively code or decode UDP

frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein the

10   DSP portion includes a stack, the DSP portion temporarily stores the UDP frame

information as UDPVA packets within the stack, and the UDPVA packets is in a

form to be transmitted directly to a network destination address device,

a security portion that positively identifies an end user at the BIntU

transceiver; and

15   the BIntU transceiver configured to transmit the UDPVA packets to the data

distribution center, and the data distribution center is configured to indicate to the BIntU

transceiver if the data distribution center has received UDPVA packets from the BIntU

transceiver.

20   24.   The broadband network system of claim 23, further comprising:

a second BIntU transceiver, the data distribution center configured to transmit

information included in the UDPVA packet that was received from the BIntU transceiver to

the second BIntU transceiver; and

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the second BIntU transceiver generating a return packet in response to the received

UDPVA packet, wherein the second BIntU transceiver transmits the return packet to the

data distribution center, and wherein the data distribution center transmits information

contained in the return packet to the BIntU transceiver, the return packet indicates to the

5   BIntU transceiver that the second BIntU transceiver has received the information in the

UDPVA packet.

25.   The broadband network system of claim 24, wherein the security portion positively

identifies an end user at the second BIntU transceiver.

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